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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,478	03/10/2004	Moshe Alon	P05441	3308
23990	7590	08/09/2005	EXAMINER	
DOCKET CLERK P.O. DRAWER 800889 DALLAS, TX 75380			LUU, AN T	
			ART UNIT	PAPER NUMBER
			2816	
DATE MAILED: 08/09/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/797,478	Applicant(s) ALON, MOSHE	
	Examiner An T. Luu	Art Unit 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10 and 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over PRIOR ART (Fig. 2), hereinafter "FIG 2" in view of the Knotz reference (US Patent 6,289,055).

FIG 2 discloses a frequency monitor circuit configured to receive at least one monitored clock (output of 21) whose frequency is to be monitored, said frequency monitor circuit comprising: a reference window generator (22), operative to output a reference window signal defining a reference window, the reference window having a given duration; a monitored clock counter (24), responsive to said reference window signal and to any one of the at least one

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monitored clock (output of 21) and operative to count all pulses in the respective monitored clock that occur within the duration of said reference window and to output a corresponding pulse count and a comparator 27 responsive to the pulse count and a given threshold M to output a corresponding indication of frequency deviation as partially required by claim 1.

FIG 2 does not disclose at least two comparators, responsive to said pulse count, each comparator being operative to compare said pulse count with a respective given threshold value and to output a corresponding indication of frequency deviation as required by the claim.

Knotz discloses in figure 2 an apparatus comprising a pulse signal circuit 1 to produce a pulse count and at least two comparators (31 and 32), responsive to said pulse count (i.e., signal on line 2), each comparator being operative to compare said pulse count with a respective given threshold value (i.e., voltage value V1 and V2) and to output a corresponding indication of frequency deviation (S31 and S32) as required by the claim.

It would have been obvious to one skilled in the art at the time the invention was made to incorporate the teaching of Knotz into the PRIOR ART since it would provide different readings at the same moment.

A skilled artisan would be motivated to combine the above arts for the benefit of determining a specific range or bandwidth of the pulse signal.

As to claim 2, figure 2 of Knotz discloses a storage and logic module 6, responsive to outputs of comparators, wherein the reference window generator, the monitor clock counter and the comparators are operative to function repeatedly and the storage and logic module is operative to store one or more indicating output by the comparators, the stored indications being available for read out at terminal SD'.

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As to claims 3 and 4, element 6 of Knotz is a simple latch wherein information is process based on one parameter (i.e., Data input at node D). However, it is common nowadays to have a simple miniature processor to analyze data for statistically purposes. Thus, it would have been obvious to one skilled in the art to replace a simple latch with an off-the-shelf processor to process information or data as required by the claim.

As to claim 5, the above arts do not disclose the aforementioned circuit being fabricated on an IC. However, they are commonly form on the same IC for the advantage of uniform temperature variation and to reduce variation in fabricating process.

As to claim 6, element 21 of FIG 2 is seen as a PLL circuit because it is known in the art that a PLL circuit is for producing a high frequency signal from a reference signal having relatively low frequency.

As to claim 7, FIG 2 discloses a frequency multiplier 23 to produce the at least one clock.

As to claim 8, FIG 2 shows RWG and MCC forming part of the frequency multiplier.

As to claim 9, they are rejected for reading on structure of elements 22 and 24 shown in FIG2.

As to claim 10, the scope of claim is similar to that of claim 5. Therefore, it is rejected for the same reason set forth above.

As to claims 15-24, the scope of claims are similar to that of claims 11-14. Therefore, they are rejected for the same reason set forth above.

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4. Claims 11-14 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over PRIOR ART (Fig. 2), hereinafter "FIG 2" in view of the Knotz reference (US Patent 6,289,055) and further in view of the Volk et al reference (US Patent 6,542,013).

PRIOR ART and Knotz in combination discloses all the claimed invention except for teaching a plurality and a selector to provide one of the plurality clock to the monitor clock counter as required by claim 11.

Volk discloses in figure 2 a PLL circuit 210 providing a plurality of clock signals PH1-T and a selector 208 to select one of the clock signal to be monitored as required by the claim.

It would have been obvious top one skilled in the art at the time the invention was made to incorporate the teaching of Volk into combination of the PRIOR ART and Knotz since a PLL can be implemented in many different ways.

A skilled artisan would be motivated to utilized teaching of Volk since Volk circuit is capable of providing various clock signals from a single clock generator such that cost and space of the circuit can be reduced.

As to claim 12, the above arts do not disclose the aforementioned circuit being fabricated on an IC. However, they are commonly form on the same IC for the advantage of uniform temperature variation and to reduce variation in fabricating process.

As to claim 13, it is obvious that the duration of the reference window being different for each monitored clock since each clock has its frequency different from the others.

As to claim 14, Knotz discloses in column 3, lines 27-29 that threshold value of V1 and V2 are different.

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As to claims 25-18, the scope of claims are similar to that of claims 11-14. Therefore, they are rejected for the same reason set forth above.


Conclusion


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to An T. Luu whose telephone number is 571-272-1746. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

An T. Luu
8-2-05 


MY-TRANG NUTON
PRIMARY EXAMINER
8/8/05